

REMARKS/ARGUMENTS

Applicants respectfully request reconsideration of this application in view of the foregoing amendments to the claims and the following comments.

The Rejection of Claims 13-30

In the Office Action dated June 1, 2006, claims 13-30 were examined and rejected under 35 U.S.C. § 103(a), as allegedly obvious over either U.S. Patent No. 6,638,450 B2 to Richard ("Richard") or U.S. Patent No. 3,846,013 to Cohen ("Cohen"), in view of U.S. Patent No. 4,929,707 to Nagata et al. ("Nagata").

Applicants respectfully traverse this rejection for the reasons set forth below.

A. General Remarks and Arguments Regarding the Cited Patents and the § 103(a) Rejections

The present invention resides in a unique method of manufacturing an optical-quality polarized part, involving the use of a special sidefill gasket configured in a manner not shown or suggested by the cited references, including Richard or Cohen.

In the rejection, the Examiner asserted that Richard and Cohen both disclose a "process of making an optical quality polarized part by injecting a plastic onto both sides of a polarizer wafer located within a mold, the injection occurring from the side—ie, side-fill gasket— . . ." He further asserted that the only deficiency of the primary Richard and Cohen patents is that they "fail to teach using a high impact polyurethane as the plastic which forms the body of the lens and that the polarizer is specifically a polyethylene terephthalate [film]."

By this Amendment, Applicants have amended independent claims 13, 23, and 27 to more particularly define the method of the invention and, thereby, to distinguish more clearly over the disclosures of the cited Richard and Cohen patents. Specifically, claims 13, 23, and 27 now all define a method of manufacturing a polarized part (or lens) utilizing a sidefill gasket including one or more inlet port holes and an adjacent reservoir for admitting liquid-based polymeric material into a mold cavity. The inventors have found this structure is particularly

effective in minimizing edge defects as the liquid-phase polymeric material shrinks away from the one or more inlet port holes during cure. The recited reservoir feature is supported by paragraphs 0049 and 0061 of the written description. The cited Richard and Cohen patents both fail to disclose a method that utilizes a sidefill gasket including such a reservoir.

Richard discusses thermoplastic injection molding with melted material injected at the side of a wafer via a flow control gate 42. However, Richard teaches away from the use of a reservoir by describing specific features of his gate to *stop* the flow of material:

“The flow control gate 42 maintains these flow features of the thermoplastic material while exhibiting a low profile to facilitate quick solidification of the thermoplastic material in the flow control gate . . . The quick solidification of the thermoplastic material in the flow control gate 42 upon the stoppage of flow prevents the flow of thermoplastic material back from the mold cavity 18 through the flow control gate 42 during compression.” [Richard, col. 7, lines 21-29.]

Thus, Richard describes a control gate that encourages solidification to prevent egress of material from the mold cavity. This is the *opposite* of the present invention, where the sidefill gasket includes a reservoir for supplying additional material to flow into the mold cavity as the material shrinks during cure.

Cohen’s teachings likewise fail to render the claimed invention obvious. At col. 5, lines 20-24, Cohen mentions using a separate syringe to inject monomer through a resilient mold element into the mold cavity. The description lacks any mention at all of a reservoir.

Nagata was cited merely for its teaching of a high impact polyurethane and, thus, fails to make up for the deficiencies of Richard and Cohen. Combining Nagata with Richard or Cohen fails to render obvious Applicants’ invention of manufacturing a polarized optical part using a sidefill gasket that includes both one or more inlet port holes and a reservoir, as called for in the Applicants’ amended claims.

B. Remarks and Arguments Addressed to Specific Claims

i. Independent Claim 13 and its Dependent Claims 14-22 and 31

Amended independent claim 13 defines a method for making an optical-quality polarized part comprising steps of: (1) forming a high impact polyurethane-based optical construct using a sidefill gasket that includes one or more inlet port holes and an adjacent reservoir for admitting liquid-phase polymeric material into the mold cavity; and (2) bonding a polarizer to the optical construct.

As discussed above, no combination of the cited patents contains all of the elements recited in amended independent claim 13, nor renders it obvious. For this reason, the § 103(a) rejection of independent claim 13 is improper and should be withdrawn.

Claims 14-22 all depend from amended independent claim 13 and define the method with greater particularity, thus further distinguishing over the cited patents. In addition, dependent claim 19 has been amended to define with greater particularity an additional feature of the invention, namely the use of a sidefill gasket including a one or more *vent* holes for venting gas and/or excess liquid-phase polymeric material from the mold cavity. This feature is supported by paragraphs 0048 and 0049 of the written description. The one or more vent holes enhance the effectiveness of the method in controlling a complete fill of the mold cavity without entrapped bubbles or gases.

For these reasons, the § 103(a) rejection of claims 13-22 is improper and should be withdrawn.

New claim 31 depends from amended independent claim 13 and more particularly defines the method to recite another preferred method of the present invention, in which the liquid-phase polymeric material is admitted into the mold cavity on *both* sides of the polarizer via a plurality of inlet port holes included in the sidefill gasket. This feature, which is supported by paragraphs 0044 and 0061 of the written description, further distinguishes over the cited patents.

ii. Independent Claim 23 and its Dependent Claims 24-26

Independent claim 23 and its dependent claims 24-26, likewise, were rejected under 35 U.S.C. § 103(a), as allegedly obvious over Richard or Cohen in view of Nagata. By this Amendment, independent claim 23 has been amended to define a method of manufacturing a polarized lens comprising steps of: (1) positioning a PET polarizer within a mold cavity defined in part by a sidefill gasket that includes one or more inlet port holes and an adjacent reservoir; and (2) forming a high-impact, polyurethane-based optical construct by admitting liquid-phase polymeric material into the mold cavity via the one or more inlet port holes and thereafter supplying additional such material into the mold cavity from the reservoir via the one or more port holes as the previously admitted material shrinks during cure. This forms a solid polarized lens with the polarizer at or near a front surface of the lens.

For all the reasons set forth above with respect to independent claim 13, the cited patents fail to show or suggest the invention defined by amended independent claim 23. The § 103(a) rejection of independent claim 23, therefore, is improper and should be withdrawn.

Further, claims 24-26 all depend from amended independent claim 23 and define the method with greater particularity, thus further distinguishing over the cited patents. Similar to claim 19, dependent claim 24 has been amended to define with greater particularity an additional feature of the present invention, namely the use of a sidefill gasket including one or more vent holes for venting gas and/or excess liquid-phase polymeric material from the mold cavity. For these reasons, and for the reasons set forth above with respect to parent claim 23, the § 103(a) rejection of claims 24-26 is improper and should be withdrawn.

iii. Independent Claim 27, its Dependent Claims 28-30 and 32

Independent claim 27 is similar to independent claim 23, but instead of calling for the polarizer to comprise PET, it calls for the polarizer to comprise a wafer. For all of the reasons set forth above with respect to independent claims 13 and 23, the cited patents fail to show or suggest the invention defined by amended independent claim 27. The § 103(a) rejection of independent claim 27, therefore, is improper and should be withdrawn.

Claims 28-30 all depend from amended independent claim 27 and define the method with greater particularity, thus further distinguishing over the cited patents. Similar to claim 19, dependent claim 28 has been amended to define with greater particularity an additional feature of the present invention, namely the use of a sidewall gasket including one or more vent holes for venting gas and/or excess liquid-phase polymeric material from the mold cavity. For these reasons and for the reasons set forth above with respect to parent claim 27, the § 103(a) rejection of claims 28-30 is improper and should be withdrawn.

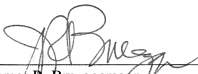
New claim 32 depends from amended independent claim 27 and more particularly defines the method to recite another preferred method of the present invention, in which the liquid-phase polymeric material is admitted into the mold cavity on both sides of the polarizer via a plurality of inlet port holes included in the sidewall gasket. This feature, which is supported by paragraphs 0044 and 0061 of the written description, further distinguishes over the cited patents.

Conclusion

This application should now be in condition for allowance. Issuance of a Notice of Allowance is respectfully requested. If the Examiner believes that a telephone conference with Applicants' undersigned attorney of record might expedite the prosecution of this application, he is invited to call at the telephone number indicated below.

Respectfully submitted,

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